What Is Claimed Is:

1.   A histogram comprising;

threshold values used in representing the number of n of bits for securing interoperability, capable of comparing the histograms represented by the number of bits which are differ from each other, including threshold values used in representing the number of N'(N'<N) of bits, when bin value is represented with the number of N of bits by quantization in order to query multimedia using histogram.

2. The histogram according to claim 1, wherein the histogram is a color histogram.

3. A multimedia query method comprising the steps of:

correcting the other bin value as smaller number of N of bits and then comparing two values if one of two histograms represents bin value with M, the other represents bin value with N(M>N), when performing the comparison between histograms represented with the number of bits which are differ from each other.

4. The multimedia query method according to claim 3, wherein the correcting process is performed by summing the bin values divided by the threshold values (TH1s) existing between two threshold values used in representing the number of N of bits to the rest threshold values except for threshold values (TH2s) used in representing the number of N of bits, among threshold values (TH1s) used in representing the number of M of bits.

5. The multimedia query method according to claim 3, wherein the histogram is a

color histogram.

6. A color histogram quantization method comprising the steps of:

dividing HMMD color space by a histogram, the color histogram comprising

5   threshold values used in representing the number of n of bits for securing interoperability,

capable of comparing the histograms represented by the number of bits which are differ

from each other, including necessarily threshold values used in representing the number of

N'(N'<N) of bits, when bin value is represented with the number of N of bits by

quantization in order to query multimedia using the color histogram, at this time,

10   (a) producing indexes of two bin values by using a threshold value 2.5/310.0

for representing 1 bit bin value;

(b) producing indexes of four bin values by using three threshold values

2.5/310.0, 9.1/310.0, and 30.0/310.0 for representing 2 bits bin values;

(c) producing 16 indexes by deciding 0.0 of bin value as an index for

15   representing 4 bits bin values, producing two indexes by bisecting a period of 0 and

0.6/310.0, producing an index in the period of 0.6/310.0 and 2.5/310.0, producing five

indexes in the periods of 2.5/310.0 and 19.0/310.0, producing six indexes in the periods of

19.0/310.0 and 85.0/310.0, and designating the value above 85.0/310.0 as an index; and

(d) producing an index by deciding 0.0 of bin value as an index for

20   representing 6 bits bin values, producing four indexes by diving a period of 0 and 0.6/310.0

into four equal parts, producing four indexes by diving the period of 0.6/310.0 and

2.5/310.0 into four equal parts, producing ten indexes by dividing the periods of 2.5/310.0

and 19.0/310.0 into ten equal parts, producing thirty indexes by dividing the periods of

13

19.0/310.0 and 85.0/310.0 into thirty equal parts, producing fourteen indexes by dividing the periods of 85.0/310.0 and 121.0/310.0 into fourteen equal parts, and designating the value above 121.0/310.0 as an index.

5   7. A histogram comprising;

n-th bit represented by quantization of bin value, wherein the nth bit bisects the respective regions divided into (N-1)th bit in order to perform a progressive bit processing capable of retrieving by using only bits, which is smaller than N, when bin value is represented with the number of N of bits by quantization in order to query multimedia

10   using histogram.

8. The histogram according to claim 7, wherein the histogram is a color histogram.

9. A histogram encoding method comprising the steps of:

arranging the first bit of every bin first and then arranging the second bit, when

15   encoding the histogram representing bin value to perform the progressive bit processing.

10. The histogram encoding method according to claim 9, wherein the histogram is a color histogram.

20